



COLORADO SPRINGS,
COLORADO

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DECEMBER 1994



Pikes Peak Radio Amateur Association, Inc.
P. O. Box 16521
Colorado Springs, Colorado 80935

FIRST CLASS MAIL



Ø BEAT



P.P.R.A.A Officers and Directors

President--	Steve Westby	W2TVIII	1540 Keith Drive	80918	570-1070
Vice-President--	John Martin	N2LWV	6233 Colony Circle	80919	531-4369
Secretary--	Lucl Stansberry	NØUD	2630 E. Uintah	80918	836-1290
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Board Member--	Jeff Ryan	NØWPA	8721 Northface Lane	80919	260-8826
Board Member--	Harry Russell	NØTPT	11210 Tracy Lane, Peyton	80831	749-0244
Board Member--	Don Hammen	AAØTH	P.O. Box 5590, Woodland Pk	80866	887-6864
Board Member--	Warren Hickey	WØYNE	112895 Tia Lane	80908	495-0471
Past President--	Steve Westby	WB7VHR	1540 Keith Drive	80918	570-1070
Ø-Beat Editor--	Kathie Martin	NØYTQ	3148 Maverick Drive	80918	594-9339
Ø-Beat Editor--	Mike Martin	NØOCZ	3148 Maverick Drive	80918	594-9339

ZERO BEAT is published monthly in the interest of the members of the Pikes Peak Radio Amateur Association, Inc., PO Box 16521, Colorado Springs, Colorado 80905. For membership and subscription information see last page of this publication. The Pikes Peak Radio Amateur Association meets monthly on the second Wednesday of each month at the Disabled American Veterans, Chapter 26, 6880 Palmer Park Blvd. at 7PM.

EDITORS: Kathie Martin, NØYTQ and Mike Martin, NØOCZ, 3148 Maverick Drive, Colorado Springs, Colorado 80918 (719)594-9339. Deadline for submission of articles or ads is the 20th of each month. Submissions may be sent to the Editor or to the club PO box. Permission to reprint articles is granted provided credit is given to both the author and this publication.

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Committee Chairpersons, etc.

Publicity	Al Craig	594-9288
Membership	Les Borst	634-3995
Education	Al Bailey	597-8514
VE Testing	Rick Brown	531-9423
Interference	Bill Petty	591-2118
RACES	Doug Moloney	unlisted
ARES	Mike Stansberry	636-1290
Skywarn	Steve Westby	570-1070
Public Service	Mike Stansberry	636-1290
CCARC	Oak Stockton	570-7782
Club Trailer	Harry Russell	749-0244
Ø-Beat	Kathie Martin & Mike Martin	594-9339
Club Historian	Al Craig	594-9288
Falcon Wanderers	Bob Nyman	574-5181
Programs		
Swapfest	Harvey Hunter	597-8964

Reminder - December Meeting

The next meeting of the PPRAA will be held on Wednesday, December 14th at the Disabled American Veterans Hall located at 6880 Palmer Park Blvd. The meeting starts at 7:00 PM. Program will be the "Annual Christmas Party."

VE Testing

Rick Brown - KDØSU

VE Testing is sponsored by the PPRAA on the 2nd Saturday of February, April, June, August, October, and December. Testing takes place at 9:00 AM at:

Denver Technical College (DTC)
225 South Union
Colorado Springs

While we prefer pre registration, walk-ins are accepted on a space available basis. Anyone wishing to take an examination should bring the following items:

1. \$5.75 (preferably a check or money order made out to ARRL/VEC) for any exam other than element 1A or 2.
2. Picture identification.
3. A copy of your current amateur license as well as the signed original. A copy of any examination credit you have as well as the original. We keep the copies.
4. Pen, pencils, and a calculator if you need one.

To pre register, or if you have any questions, please call me at 531-9423. Please do not call DTC, they only provide us the rooms for testing and they do not have any information concerning the test session.

NOVICE AND TECHNICIAN CLASSES

A Novice and Technician class for those persons wishing to obtain or upgrade an Amateur Radio License will be conducted at the Tesla Society, 2220 East Bijou Street in Colorado Springs. The classes are free to the general public; however, each class attendee should be prepared to purchase the ARRL "Now Your Talking" textbook which costs approximately \$19. In addition to the textbook, the Technician Class examination will cost \$5.75.

The Novice class will be held each Monday and Wednesday evening beginning at 6:00pm on Wednesday, January 11th; and ending on Wednesday, February 8th, 1995. The class will cover an introduction to International Morse Code and novice theory on amateur rules, regulations, and operating practices. The class will also cover basic electronic, antenna, and transmission theory required to pass the Novice Licensing Examination. Each individual who wishes to obtain their license should be prepared to attend each class for the five week period.

The Technician class will be held each Monday and Wednesday evening beginning on Monday, February 13th; and ending on Wednesday, March 1st, 1995. The class will cover technician theory on amateur rules, regulations, and operating practices; and electronic, antenna, and transmission theory required to pass the Technician Licensing Examination. Each individual who wishes to obtain their license should be prepared to attend each class for the three week period.

Those persons wishing to attend the courses should pre-register by contacting the Tesla Society at 475-0918 or Frank McNally at 596-8733 during the evening.



Ø-Beat Traffic Net

Hello Everyone,

On behalf of all the Mumlop people, Franklin and I wish all the Human people a Happy Holiday Season.

Actually, it seems as if the PPRAA Human people celebrate the holidays all-year-round because they are always doing things for other Human people. We understand that the DAV appreciates all the donations from PPRAA members, especially because such donations are needed now more than ever.

Ron, the Human person who was just elected money-counter (we think that's pretty funny because he sure doesn't look like a money-counter)—anyhow, Ron has invited the Mumlops to the PPRAA Christmas Party, and of course we plan to attend. It was nice of Ron to invite us because he knows we like to have a good time and that we tend to get a little rowdy. We promised Ron that we would behave ourselves (-no catapult rides and landing in peoples' eggnog, etc.).

Franklin and I are still awaiting the arrival of the two additions to our family. We don't expect them until the last week in December. We will throw a big party on the day after their arrival. It is a Mumlop custom. We will get very rowdy. The PPRAA Human people are of course invited.

Ta Ta for now. See you at the Christmas Party.

Prunella and Franklin

The PPRAA received the donation of some books from ARRL via AGØXX, Marshall Quiat. Two ARRL 1994 Handbooks were donated to our local libraries...one to the East Library and the other downtown. You can check out these books from any Library by making a request and they will get it for you in just a matter of a day or so.

Rosie, WAØMNL

PPRAA General Meeting November 9, 1994

67 members and guests in attendance.
WB7VHR-President started the meeting with introductions.

NKØP--Treasurer report, through 11/9/94:

Treasurers Report
Previous Balance 1939.18
Income 235.00
Expenses 410.70
New Balance 1763.48

Minutes were approved as printed in Ø-Beat.
Committee reports:

V.E. Testing: Rick KDØSU. Testing will be held December 10, 1994.

ARES: Mike KØTER and Jeff NØWPA. Mike reported there were 16 events that ARES helped with, in which 102 people helped. Individual time contributions ranged from 1 hour to 102 hours. Jeff gave ARES hats to all the AECs.

Announcements:

--NØNKG is starting an SSB NET on Mondays 7:00pm on 144.22 MHz, upper sideband.

--WAØMNL reported she's tired of cleaning up after meetings. We need everyone to clean up after themselves.

--NKØP said that By-Laws are available on Rob's telephone BBS.

--Guests Ed and Jean Warwick asked if anyone could help them with donations of radios and equipment for their missionary work.

--KØTER and WA2OOD displayed some items that were donated by Mr. Hrebek.

--It was suggested to have a Ham of the year award. It was voted and approved that Hammy be awarded permanently the Ham of the Year. The members of the board need nominations for the Ham of the year by the board meeting. Hammy of the month went WB7VHR Steve.

--After break, door prizes were given.

--Program: Presented by Lauren Libby KXØO on his DXpedition to Cuba. THANKS, LAUREN

Submitted by Luci, NØOUD, PPRAA Secretary

PPRAA Board of Directors Meeting November 14, 1994

--Held at NKØP's home.

--Present were WB7VHR-Steve, NØYTQ-Kathie, NØOCZ-Mike, NØSFP-Harry, NØURR-John, NØWPA-Jeff, AAØTH-Jill, NKØP-Ron, and NØOUD-Luci.

--Steve opened the meeting at 7:13pm. John, NØURR volunteered to be the new program chairman.

--The Christmas Party will be held December 14, 1994 at the D.A.V. where club meetings are held. The meeting will be prior to the festivity. Everyone please bring their favorite goodies. Punch will be furnished. The board approved \$100 for extras for the Christmas party.

--A motion was made and approved that we give Mr. Hrebek, the gentleman who has been donating the surplus equipment, a yearly membership. The Motorola radios donated to the club need crystals for use.

--There will be a special board meeting on December 12, 1994 at NØWPA's home to discuss the by-laws. In reviewing the by-laws, we find there needs to be some clarification of the wording of the amendments, so they can be read and understood by all. The board has been in violation of the by-laws, so to rectify this matter a special By-Laws Committee has been formed with NKØP, NØWPA, NØSFP, and KCØNC, to mend the past neglect of the by-laws. We still would like to be your voice in the club. Please contact any member of the committee with your input. The issue concerning the by-laws will be brought up at December's meeting. In hopes that all changes will be finalized by the January meeting.

--Next board meeting will be at Kathie and Mike's home.

Submitted by Luci, NØOUD, PPRAA Secretary

CCARC MEETING

PPRAA will host the next meeting of the Colorado Council of Radio Amateur Clubs at 1:00pm, Saturday, 25 March 1995. Location is to be in the Falcon Division Community Room, Falcon Substation, Colorado Springs Police Department, 7850 Goddard Street. Goddard Street is parallel to the north end of Academy Boulevard, within the loop of Kelly Johnson Boulevard, one block south of Interstate 25. Whit Brown, WBØCJX, Frequency Coordinator for Colorado, and Chairman, CCARC, will demonstrate the CCARC-owned Automatic Scanning and Recording Receiver. All amateurs are invited to attend, especially those operating a VHF-UHF repeater in Colorado. The PPRAA is a charter member of CCARC.

Budget Electronic Keyer

Product Review
Rick Brown KD0SU

This past summer Ten-Tec introduced a line of inexpensive kits for amateur radio. One of the first items to catch my attention was a simple electronic keyer for only \$9. I was looking for a small keyer to go along with my QRP rig. This looked like a good deal that would fit in my budget.

When I received the kit I found a good quality circuit board and all of the components to mount on the board. You must supply the case (or mount it in your rig) and all of the connectors. I built the kit in a small plastic box from Radio Shack that I already had lying around from another project. Even if you need to buy the extra parts, you can still get by for very little money.

The keyer uses two 556 dual timers for the dits, dahs, and spacing. The circuit uses one of the timers as a sidetone generator. This keyer has a weight control to vary the dash length at higher speeds. This is a feature not found on most keyers in this price range. The keyer operates from 5 to 18 WPM or 10 to 35 WPM depending on the timing resistors you select when you build it. This is a nice feature as it gives you a smooth control of the speed when you vary the speed control potentiometer.

According to Ten-Tec, the power supply can range from 5 to 13.5 volts with the current varying from 10 to 25 mA respectively. If low current drain is important, they suggest replacing the ICs with the CMOS version. I have not confirmed this, but they claim the power drain would only be 1.7 mA at 13.5 volts.

If you want to make the keyer as small as possible and still use the sidetone feature I suggest using a piezoelectric speaker element (RS 273-091) from Radio Shack. It is approximately 2 inches in diameter and less than 1/8th inch thick. It requires very little drive power and is very easy to mount.

The keyer worked the first time I hooked it up and tried it out. I expect anyone with basic soldering skills could easily put the kit

together. It will key any modern solid state rig, but if you are using a rig from the vacuum tube era you will need to add a keying relay or high voltage transistor. With the sidetone feature this kit would also make a great code practice oscillator. The only disadvantage I found is that it is not an iambic keyer. I didn't realize how dependent I had become on that feature of my keyer. I still believe it is a great buy for someone who is looking for an easy way to get started with electronic keying.

The only other items you need are a keyer paddle and a rig to get on the air. This is a great way to spend a little money and have a lot of fun. Who knows, you might even find CW is FUN!!



TWAS THE NIGHT BEFORE XMAS...AT OUR QTH

Twass the night before Xmas and all through our pad,
The old rig was tuned up, the skip the best we've had.
The stockings are hung by the chimney with care,
All washed clean, but Grandpa's feet, they are bare.

When out on the lawn there arose such a noise,
"The kids are coming, that must be the boys."
We looked out and to our total surprise,
No kids, but a little old man in disguise.

With eight reindeer and a old loaded sleigh,
"Hey you," yelled Grandpa, "You're in the way.
Take that piece of junk and get off my lawn."
Santa just smiled and said, "I won't be long."

Grandma wrung her hands, she was mad and in a fuss
She said, "What ever will the neighbors think of us?"
"You'd better go," She said, "And take all this stuff,
You're a dirty old man and we've had quite enough."

Santa just smiled and said, as he reached in his pack,
"Here's a new HF Rig, you want I should take it back?"
"Heck no," said Grandma as she danced a jig,
"We sure are needing a brand new HF Rig."

"How about some cookies and milk for you?"
Asked Grandpa, 'cause he liked the new rig too.
"No thanks," said Santa as he made ready to go,
"I gotta git going.....I'm old and I'm slow."

As Santa took off he threw out yet another box,
It was an antenna and for Grandpa a new pair of sox.
'73 and A Merry Xmas,
WA0MNL, Rosie

PPRAA

December 1994



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PPRAA

January 1995



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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8 8:00 AM COLORADO ARES NETS 3928.0 6:30 PM RACES HF NET 3990.5 8:00 PM SCTN 146.97	9 8:00 PM SCTN 146.97	10 7:00 PM ARES NET 146.97 8:00 PM SCTN 146.97 9:00 PM RACES NET 146.97	11 8:00 PM SCTN 146.97	12 8:00 PM SCTN 146.97	13 8:00 PM SCTN 146.97	14 8:00 PM SCTN 146.97
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COLORADO SPRINGS H.S. and WORLD WAR ONE

*Memories of Charles E. Hathaway
--Class of 1922*

Weber Street from Platte to Boulder was used as drill ground. Each class had drill squads in their respective companies. Civil War muskets were used by some companies - others had only dummy drill rifles. (See *Lever Annual 1919* for more accurate account.) I was Squadron Company C.

In the fall of 1918, the town's people were becoming very ill. Many with white cotton masks were seen on the streets. In the first week of November, the high school was closed for one week. November 11 came at that time. The end of the war and the Armistice was announced with joy.

With the end of the war, amateur radio was allowed back on the air.

C.S.H.S. was awarded a call. I do not remember it. We were in the 9th District at the time. The western area grew so rapidly, the 9th was broken into two districts. The 10th, or slant zero (Ø), was added by the Federal Bureau of Communication. The annex to the high school had a large brick chimney at each corner. Boys of the Radio Club erected a tall pole in each of these chimneys. At each end, these poles were spanned by cable from which was suspended a cradle of four wires acting as a long wave antenna. At that time, amateurs were allowed 200 meters and above. Soon the value of air lanes was discovered, and the amateurs were restricted to narrow bands.

The station consisted of a one kilowatt Thordarion spark transformer about fifteen inches high and perhaps weighing as much as fifty to seventy-five pounds. This monster would emit a spark about six inches long and at thousands of volts. If this had been directly transmitted into the air, it would have had an irregular tone. A rotary spark gap, run by a varying speed motor of low power, controlled the pitch of the signal.

The same device was used by the ships at sea. The continental code was about the only radio to listen to, and on a cold winter night to hear the whine of a distant station and read their message was a joy to the ears.

The receiver consisted of early triad tubes and three plug-in coils plus ear phones. Many

years later, I used to see those four gaunt poles standing even through the cradle of four wires had been removed. My call was 1935 W9UEK - now WØUEK.

A granite stone was placed at the high school entrance on Platte and Nevada. The stone was grey about five feet high inscribed with the names of the C.S.H.S. boys killed in the war. A few students gathered there. They were enhanced by a few passers by. A few words were spoken; a prayer was offered. We, of about twenty in the Boys Glee Club, sang an appropriate song. The crowd dispersed.

I have always found it difficult to comprehend that these Silent Names represented live boys in the halls and classrooms of C.S.H.S. such a short time before.

Submitted by Bernard J. Rose. Previously printed in The Senior Lever, CSHSoPalmer Alumni Association Newsletter, dated July 1994.



OM/YL LUNCH BUNCH

The OM/YL Lunch Bunch met for their November get together--complete with a turkey that decorated the table during the meal. December will be our Christmas get together. We will meet noon-time December 22nd at the Country Buffet located in the Citadel Crossing, 721 N. Academy Blvd.

We have arranged for the use of their private dining room, so when you arrive ask for the Lunch Bunch Radio Operators Christmas Party. We had such fun last year we decided to do a gift exchange again this year. If you wish to participate bring a gift (value around \$3). If you wish to exchange a gift with a man or woman mark it accordingly.

KAØPXE, Connie has been writing this column this past year and giving me the credit...Thanks Connie from all of us, for all your work in keeping us informed.

Rosie Calaway, WAØMNL
Phone #471-9965



Dits and Bits

For Sale: Tektronix 545A Oscilloscope with 53/54C plug in. Two channel, triggered sweep with delay sweep. 35MHz bandwidth. Call Bob Hrebek, KE8ØV at 630-1859

For Sale: Heathkit Comanche/Cheyenne RCVR/XMITTER, Mic, and power supply. 80, 40, 20, 15, and 10M SSB & CW. Great starter radio \$100 OBO. Call Bob at 535-1209 (days)

For Sale: Heathkit 'Cantenna,' 50 ohm RF dummy load with oil. \$15. Call Bob at 535-1209 (days)

For Sale: Data General, Model 1 Laptop (8086), dual 720K floppy drives, internal modem, battery pack, ISIP \$40 OBO. Call Bob at 535-1209 (days)

For Sale: Mosely TA-33 Tri-bander, near mint condition. Also, Alliance HD73 rotor and control. Nearly \$500 if new. \$295 or make offer. Will sell separately. Call Mark, NØEPF at 442-0917

For Sale: Zenith ZTX-11 data terminal and amber monitor. Built in 300 baud modem and dialer. Ideal entry level packet terminal. \$494 new (1984). Sell for \$50. Call Steve Bygren at 599-3612 (evenings)

For Sale: Yaesu FT-620B, 6 meter SSB, CW, AM transceiver. Runs 15 watts out, has Advanced Receiver Research preamp, and Daiwa speech processor. I worked 48 states and 35 countries with this rig. \$200.



Icom IC-211, 2 meter multimode base station type transceiver. This is a great way to get on SSB or CW. \$325.

Fukuyama Multi 750 2 meter multimode mobile. This rig was not made for export, but does cover the entire 2 meter band. This is a great rig to dedicate to packet or monitoring a simplex channel. \$100.

HQ-1 Mini Quad, 6, 10, 15, & 20 meter beam. Small light weight antenna easily turned by a TV rotator. \$60.

Hustler 4BTV vertical. Covers 10, 15, 20, & 40 meters. In great shape. \$35.

Wanted: 430 - 450 Mhz amplifier, 10 watts in and 80 to 100 watts out. (Mirage D1010 or similar)

Six meter module for a Yaesu FT-726R.

I am running out of room to store this great stuff. Call me at 531-9423, evenings before 9:00 PM. Rick - KDØSU

Stolen: ICOM P2AT Walkie Talkie s/n 4594 or 3887. Contact Ken at 636-1780

MEMORANDUM

TO: THE PIKES PEAK RADIO AMATEUR ASSOCIATION
BOARD MEETING November 14, 1994

FROM: CARIBBEAN MISSIONS - c/o P. O. BOX 1723 Colo Spgs, CO 80901
ED WARWICK - 632-4383
JEAN WARWICK - 635-7215

SUBJECT: ASSISTANCE IN THE FORM OF CASH OR NEW RADIO
EQUIPMENT TO BE USED IN THE DOMINICAN REPUBLIC,
HAITI AND NEIGHBORING ISLANDS

Upon making known our request for assistance at your November 9th meeting, we had the opportunity to talk to some of your members and were advised to request specific needs in the area of brand name, price and quantity, as well as promoting these requests through your Ø BEAT newsletter and through other radio clubs throughout the state.

In addition to this, Rosie Calaway suggested that she would be meeting with a radio manufacturer and would ask if a donation to the mission would be possible in a public relations type offering.

We contacted Mark Grennon, Missionary/Pilot, to the Dominican Republic, Darren Truel, Missionary and Licensed Radio Operator to Haiti, and Jim Newman, WV4QCW, Instructor and Licensed Operator of the Caribbean Missions, Lexington, South Carolina, as well as John Thompson, N5EHP of Ham Radio Outlet of Denver, concerning new radios and other equipment needed for the missionaries on the island of Hispanola. All suggested the following:

Two (2) 80 Meter Band Radios - suggested type or similar, HF-YAESU No. FT840
Suggested price - \$849.00 each

Two (2) Antennas/Vertical - No. R7 - \$379.95 or R5 - \$279.95 (each)

Two (2) Hand-held 2 Meter Band Radios - There are thirty different brands
priced from \$250.00

DC 12 Volt Power Supply - Price unknown

We appreciate your assistance in driving this project and assisting the Mission field and workers in the Caribbean.

Ed Warwick

Jean BS Warwick

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Editor's Corner

A very deep and appreciative thank you to Mr. Bob Hrabek for his generous donations of various types of equipment for the use of our members as well as our club.

We would like to take this opportunity to thank the members of the PPRAA for their kindness and contributions to Ø-Beat. We can truly say without the articles and help from you the Ø-Beat would not be what it is. We would personally like to thank Ron for helping us get started; Les for coming through with the mailing labels; Rick for his interesting articles and updates on VE testing and results; Rob for his helpful information on Packet; Pruenella for keeping us informed of the Mumlop life; Connie and Rosie for their OM/YL Lunch Bunch updates; and all the others whom we have not mentioned for submitting articles and pictures. If you have not seen your article you will as we will hold them for future printing. Without your help producing Ø-Beat would be very difficult. Thanks to all and to all a Merry Christmas and a Happy New Year.

'73, Kathie and Mike

TEST RESULTS

Rick Brown - KDØSU

We had another successful examination session at the end of the Novice/Technician class taught by Al, ADØZ and Frank, KFØWF. There were five people earning new licenses as follows:

Technician

Cynthia Manery
John Nielson
Robert Piersant

Technician with HF

Edward Cline
Roger Spaulding

Congratulations on the hard work and earning their license.

Thanks to the following examiners for giving their time to support the test session.

Bill, K4YCD
Frank, KL7IPV

Butch, KAØWWT
EJ, KDØNB

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